August 12, 2014

Pam King
Washington Holdings
600 University Street, Suite 2820
Seattle, WA 98101

RE: Water Quality Testing, EPA Tenant Improvement Project
Park Place Building
Sampling Event #9 – Repeat Sampling on Floors 14, 15, & 19
Water Fountain Sampling on Floors 10 & 8
1200 6th Avenue
Seattle, Washington

RGA Job# R3137233

On August 8, 2014, Andrea Liljegren, Industrial Hygienist for RGA Environmental, A Terracon Company (RGA) conducted drinking water testing for lead and copper at the above captioned site. Testing conducted in accordance with EPA-812-B-94-002 was used to collect repeat samples from floors 14, 15, and 19. Additional new water sources (drinking fountains) were also tested on floors 10 and 18.The purpose of the testing was to evaluate plumbed drinking water sources following tenant improvement renovations. Ms. Liljegren was escorted by Building Security.

SAMPLING PROCEDURES

A total of fourteen (14) drinking water samples were collected during the sampling event. Samples were collected in sample bottles provided by the Aquatic Research, Inc. (250 ml, polyethylene with nitric acid preservative). Samples were analyzed for lead and copper in drinking water using EPA Method 200.8.[1] Drinking water samples were collected from the women's restrooms on the 14th and 15th floors, the men's restroom on the 15th floor, water fountains outside the women's restrooms on the 10th and 18th floors, the ADA restroom sink on the 19th floor, and the water main on the 1st level of the parking garage at the Park Place building in Seattle, Washington.

The sampling protocol for the water fountains and restroom faucets consisted of a "first draw" sample (first water out of the tap following at least 8 hours of non-use) and a "secondary draw" sample (water collected after 30 seconds of flushing).

The sampling protocol for the Service Connection/ Service Main consisted of opening the tap closest to the service connection located in the garage and waiting for the water temperature to change from warm to cold before collecting the sample for the Service Connection. The water to then flushed for an additional 3 minutes following the collection of the Service Connection sample before collecting the Service Main Sample.

SAMPLE RESULTS

Table 1 below presents the sample results for samples (lead & copper) collected on August 8, 2014.

[1] The water samples collected were submitted to Aquatic Research, Inc. (lead and copper) in Seattle, Washington for analysis.

Table 1—Lead Water Sample Results – August 8, 2014

Location	SAMPLE ID	Lead (Pb) µg/l)	Copper (Cu) µg/l)	Lead Result	Copper Result
FLOOR 10					
Water Fountain next to Women's restroom- Floor 10	10-WWF-FD-175	<1.0	19.6	Pass	Pass
	10-WWF-SD-176	<1.0	13.6	Pass	Pass
FLOOR 14					
Women's Restroom Sink	14-WR-FD-177	12.0	160	Pass	Pass
	14-WR-SD-178	2.1	135	Pass	Pass
FLOOR 15					
Women's Restroom Sink	15-WR-FD-179	11.6	156	Pass	Pass
	15-WR-SD-180	1.4	129	Pass	Pass
Men' Restroom Sink	15-MR-FD-181	**24.2**	166	Action Required	Pass
	15-MR-SD-182	1.9	118	Pass	Pass
FLOOR 18					
Water fountain next to Women's restroom- Floor 18	18-WWF-FD-183	<1.0	16.7	Pass	Pass
	18-WWF-SD-184	<1.0	11.2	Pass	Pass
FLOOR 19					
ADA Restroom- Floor 19	19-ADA-FD-185	1.5	400	Pass	Pass
	19-ADA-SD-186	3.2	497	Pass	Pass
Parking Level 1					
Service Connector/Service Main	P1-P1SC-FD-189	1.2	24.4	Pass	Pass
	P1-P1SM-SD-190	<1.0	6.2	Pass	Pass
EPA Standard*		**0 AL: 15 µg/L**	**AL: 1300 µg/L**		

*EPA Drinking Water Maximum Contaminant Levels

FD=First Draw
SD=Second Draw
MR=Men's Restroom
WR=Women's Restroom
WWF= Women's water fountain
ADA= ADA restroom
SC=Service Connector
SM=Service Main

CONCLUSIONS

Five of the fourteen water samples collected contained no detectable concentrations of lead (above 1 µg/L). Eight of the fourteen samples contained detectable lead concentrations between 1 and 15 µg/L. No remedial or mitigation action is required for locations with sample results below the Drinking Water action level. One of the fourteen samples was above the action level. The sample above the action level was the first draw sample collected from the Men's Restroom on the 15th floor. Water from this source should not be used until the source of lead is determined and mitigated.

All samples contained copper concentrations between 4 and 1300 µg/L. No remedial or mitigation action is required for locations with sample results below the Drinking Water action level.

LIMITS OF SURVEY

This report does not represent all conditions at the subject site as it only reflects the information gathered from specific locations. Observation or sampling of other work areas was not within the scope of RGA's work and was not performed.

This report was prepared pursuant to the contract RGA has with the client. Unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

RGA appreciates the opportunity to provide you with technical support on this project. If you have any questions, please contact the undersigned at 206-281-8858.

Report Prepared by,

Leah Webb
Administrative Assistant
RGA Environmental, Inc.

Report Reviewed by,

Eric Hartman, CIH
Senior Project Manager
RGA Environmental, Inc.

Attachments:
Lab Reports

IEH - AQUATIC RESEARCH

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER:	**RGA001-02**	**PAGE 1**	
REPORT DATE:	**08/11/14**		
DATE SAMPLED:	**08/08/14**	**DATE RECEIVED:**	**08/08/14**

FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER SAMPLES FROM RGA ENVIRONMENTAL

CASE NARRATIVE

Fourteen water samples were received by the laboratory in good condition and analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of these samples. Sample data follows while QA/QC data is contained on the subsequent pages.

SAMPLE DATA

SAMPLE ID	LEAD (ug/L)	COPPER (ug/L)
10-WWF-FD-175	<1.0	19.6
10-WWF-SD-176	<1.0	13.6
14-WR-FD-177	12.0	160
14-WR-SD-178	2.1	135
15-WR-FD-179	11.6	156
15-WR-SD-180	1.4	129
15-MW-FD-181	24.2	166
15-MW-SD-182	1.9	118
18-WWF-FD-183	<1.0	16.7
18-WWF-SD-184	<1.0	11.2
19-ADA-FD-185	1.5	400
19-ADA-SD-186	3.2	497
P1-P1SC-FD-187	1.2	24.4
P1-P1SM-SD-188	<1.0	6.2

IEH - AQUATIC RESEARCH

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER: **RGA001-02** **PAGE 2**

REPORT DATE: **08/11/14**

DATE SAMPLED: **08/08/14** **DATE RECEIVED:** **08/08/14**

FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER SAMPLES FROM RGA ENVIRONMENTAL

QA/QC DATA

QC PARAMETER	LEAD (ug/L)	COPPER (ug/L)
METHOD	EPA 200.8	EPA 200.8
DATE ANALYZED	08/08/14	08/08/14
REPORTING LIMIT	1.0	4.0
DUPLICATE		
SAMPLE ID	10-WWF-FD-175	10-WWF-FD-175
ORIGINAL	<1.0	19.6
DUPLICATE	<1.0	19.7
RPD	NC	0.61%
SPIKE SAMPLE		
SAMPLE ID	10-WWF-FD-175	10-WWF-FD-175
ORIGINAL	<1.0	19.6
SPIKED SAMPLE	48.1	76.3
SPIKE ADDED	50.0	50.0
% RECOVERY	96.16%	113.42%
QC CHECK		
FOUND	49.2	52.4
TRUE	50.0	50.0
% RECOVERY	98.40%	104.80%
BLANK	<1.0	<4.0

RPD = RELATIVE PERCENT DIFFERENCE.
NA = NOT APPLICABLE OR NOT AVAILABLE.
NC = NOT CALCULABLE DUE TO ONE OR MORE VALUES BEING BELOW THE DETECTION LIMIT.
OR = RECOVERY NOT CALCULABLE DUE TO SPIKE SAMPLE OUT OF RANGE OR SPIKE TOO LOW RELATIVE TO SAMPLE CONCENTRATION.

SUBMITTED BY:

Damien Gadomski

Damien Gadomski
Project Manager

RGA001-02

Page 1 of 1

IEH - Aquatic Research
3927 Aurora Ave N • Seattle • WA • 98103
P: 206-632-2715 F: 206-632-2417

Chain of Custody Form

REPORT TO:
Client: RGA Environmental, A Terracon Company
Address: 3317 3rd Ave S, Ste D
Seattle WA 98134
Contact: Eric Hartman
Email: eric.hartman@rgaenv.com
Phone: 206-281-8858 Fax: 206-281-8922

INVOICE TO: (IF DIFFERENT FROM REPORT)
Client:
Address:
Contact:
Email: heather.dinuya@rgaenv.com
Phone: Fax:

PROJECT INFORMATION
Quote No.:
Client PO:
Client Project: ~~R3137233~~ R3137233

Reporting/Invoicing Format
☐ Fax ☒ Email ☐ Mail

QC Data Reported
☒ Yes ☐ No

Sample Disposal
☐ Hold ☒ Dispose ☐ Return

Turn Around Time (TAT)*
☑ Next Day 24hr ☐ 2 Business Day
☐ 3 Business Day ☐ Standard

Specific Date:
*Advanced notice required for Rush Analysis

SAMPLING Date (mm-dd-yy)	Time	Matrix**	SAMPLE DESCRIPTION (This Will Appear On The Report)	Number of Containers	Analysis Requested: Lead EPA Method 200.8	Copper	Field pH (if applicable)	Field Temp (if applicable)	Metals Field Filtered (Y/N)	LAB USE ONLY: Containers Received	Case File Number: Temp	Lab ID
08/08/14	0610	W	10-WWF-FD-175	1	X	X				1	23.2°C	
	0610		10-WWF-SD-176		X	X				1		
	0622		14-WR-FD-177		X	X				1		
	0622		14-WR-SD-178		X	X				1		
	0630		15-WR-FD-179		X	X				1		
	0630		15-WR-SD-180		X	X				1		
	0636		15-MR-FD-181		X	X				1		
	0636		15-MR-SD-182		X	X				1		
	0642		18-WWF-FD-183		X	X				1		
	0642		18-WWF-SD-184		X	X				1		
	0648		19-ADA-FD-185		X	X				1		
	0648		19-ADA-SD-186		X	X				1		
	0656		P1-P1SC-FD-187		X	X				1		
	0659		P1-P1SM-SD-188	1	X	X				1		

Turb <1 NTU mw 8/8/14

Turb >1 NTU
Turb <1 NTU mw 8/8

(19) TOR

**Matrix: B=Biota, DW=Drinking Water, GW=Ground Water, P=Paint, S=Soil, SD=Sediment, SL=Sludge, SW=Surface Water, WW=Wastewater

Comments:

	Date	Time
Sampled By	8/8/14	
Received By	8/8/14	0815
Relinquished to Aquatic By (Signature)	8/8/14	0815

Shipped By | Shipping Reference

Received at Aquatic By | Date | Time